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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,321	01/29/2004	Masayasu Kato	14-025	1222
23400	7590	10/17/2005	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			BARBEE, MANUEL L	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,321

Applicant(s)

KATO ET AL.

Examiner

Manuel L. Barbee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1 and 5-8 are objected to because of the following informalities:

Claim 1 lacks antecedent basis for the "warning device" on line 13 of the claim.

Claims 5-8 have a limitation for "the signal generation portion", on line 3 of each claim. This limitation lacks antecedent basis in view of the amendment to claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakiyama et al. (JP 2001033356 A) in view of Andersen (US Patent No. 3,601,655).

The Japanese patent to Sakiyama et al. was translated and this discussion will refer to page and paragraph numbers of the translation. With regard to a signal abnormality detection portion for detecting a signal abnormality temporarily reproduced when a repair center vibrates a signal wire, as shown in claim 1, Sakiyama et al. teach a device for inspecting a wire harness that detect poor contacts when vibration is applied to the wire harness (page 2, pars. 10, 11). With regard to a holding portion for latching the detection result, as shown in claim 1, Sakiyama et al. teach a flip-flop circuit to detect and hold the detection of an interruption in current flow (pars. 12, 13; Drawings 2,

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3). With regard to an output circuit for outputting the latch signal and an external connection for being connected to the output circuit, Sakiyama et al. teaches that the output of a single-shot trigger is connected to a counter, which is connected to a display (par. 13; Drawing 3). Sakiyama et al. do not teach a warning device, as shown in claims 2 and 4. Andersen teaches providing a signal warning in the event of circuit discontinuity (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wire inspecting device, as taught by Sakiyama, to include a warning device, as taught by Andersen, because then critical events would have been communicated to the user immediately.

With regard to determining that the normal state is when the analogue signal is being input continuously and the abnormal state is when the signal is interrupted, as shown in claim 8, Sakiyama teach a device for inspecting a wire harness that detect poor contacts when vibration is applied to the wire harness while a current source is applied to the wiring harness (page 2, pars. 10, 11; Drawing 1, current source 21).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakiyama et al. in view of Andersen, as applied to claim 1 above, and further in view of Asada (US Patent No. 5,629,606).

Sakiyama et al. and Andersen teach all the limitations of claim 1 upon which claim 5 depends. Sakiyama et al. and Andersen do not teach that the signal accords with a determined communication protocol or that signal abnormality is determined when protocol is interrupted, as shown in claim 5. Asada teaches detecting whether a transmitting wire is disconnected when an output does not change although an ECU is

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sending a switching command (col. 2, lines 24-65; col. 7, lines 22-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wire inspecting combination, as taught by Sakiyama et al. and Andersen, to include detecting abnormality when a communication protocol is interrupted, as taught by Asada, because then breaks in communication lines would have been detected.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakiyama et al. in view of Andersen, as applied to claim 1 above, and further in view of Masuda (US Patent No. 5,568,529).

Sakiyama et al. and Andersen teach all the limitations of claim 1 upon which claims 6 and 7 depend. Sakiyama et al. and Andersen do not teach that the signal is a digital pulse signal or that signal abnormality is determined when pulse signal is interrupted, as shown in claim 6, or a digital signal, as shown in claim 7. Masuda teaches determining that a signal is disconnected when a pulse signal is interrupted (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the diagnostic system, as taught by Coverdill, to include detecting abnormality when a pulse signal is interrupted, as taught by Masuda, because then breaks in digital pulse signal lines would have been detected.

Response to Arguments

6. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 571-272-2212. The examiner can normally be reached on Monday-Friday from 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mlb
October 11, 2005



PATRICK ASSCUD
PRIMARY EXAMINER